

Civil Engineering · Environmental

July 3, 2006

Chief Mike Lowry City of Escondido Fire Department 201 North Broadway Escondido, CA 92025

County of San Diego Department of Planning and Land Use 5201 Ruffin Road, Suite B San Diego, CA 92123 Attention: County Fire Marshal

Fire Protection Plan – Short Form for Homeland Estates TM 5362, ER 04-08-010, APNs: 238-231-14, 26, 27 and 49 Location: Off Miller Avenue, adjacent to Alexander Drive

This letter is written in response to a request from the County of San Diego Department of Planning and Land Use for a Short Form Fire Protection Plan consistent with California Fire Code Article 86, to address the following items:

Location

Subject:

The project site is located in the North Metro Planning Area and consists of 10 residential lots with requisite access and infrastructure on a 12.14 acre site located to the east of Miller Avenue and north of Clarence Street near the City of Escondido, California. Accessibility is via Miller Avenue on a public street "Street A".

The project area is served by the City of Escondido Fire Department.

Topography and Geology

Under existing pre-development conditions, the project site is gently sloped, with slopes ranging from 5 to 15% with the average being around 10%. Post-construction conditions create public "Street A" and nine residential pads ranging from elevation of 705 feet to 606 feet. Pad slopes do not exceed 20' in height.

According to the U.S. Geological Survey, five soil types occur onsite.

RaC – Ramona sandy loam, 5 to 9% slopes

RaB – Ramona sandy loam, 2 to 5% slopes

BmC – Bonsall sandy loam, thick surface, 2 to 9% slopes

FaDa – Fallbrook sandy loam, 9 to 15% slopes

PfC - Placentia sandy loam, thick surface, 2 to 9% slopes



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Please see the attached copy of the Geotechnical Investigation report prepared by Geocon in April 2006.

Flammable Vegetation

At the present time, the property is vacant, undeveloped land. In the past, this property has been under agricultural use. The majority of the site is non-native grassland with a large eucalyptus grove in the southeast corner of the site. There are smaller areas on the site that consist of disturbed and developed areas.

Climate

Climate conditions for the project site are generally mild with average San Diego precipitation.

In terms of fire protection, the most important wind pattern to the project area is an off-shore wind from the north / northeast. This is commonly called a Santa Ana wind. A Santa Ana wind generally exhibits strong, hot, and dry conditions with very low relative humidity. Although these desert-borne winds may occur at any time of year, they are most likely to occur during the late fall months (September through November).

The prevailing summer season wind pattern is from the southwest. These winds are lower in velocity and generally have higher relative humidity. During the summer months, higher velocity winds with lower relative humidity may occur.

Winds from other directions (northwest, south and west) may occasionally be gusty and strong. However, these winds are most likely to contain cooler moist air with a higher relative humidity.

Additional fire-related issues shall also be addressed:

- 1. Water Supply
- 2. Fire Access
- 3. Building fire resistance and ignition
- 4. Fire Protection Systems
- 5. Fire Protection Equipment
- 6. Defensible Space
- 7. Vegetation Management
- 8. Fire Behavior Model

1. Water Supply

The project is within the Rincon Del Diablo Fire District / City of Escondido Fire District. The districts have tentatively agreed to a mutual service agreement.

Water shall be supplied by Rincon Del Diablo Municipal Water District.

A single new fire hydrant is proposed off Alexander Drive to service Lots 8 and 9. The hydrant will be capable of delivering 1,500 GPM with a minimum of 20psi residual pressure. This fire hydrant will need to be in place (along with pavement) prior to combustibles being brought onsite.

Three new fire hydrants are proposed along "Street A". One is located on the north side of "Street A" and two are located on the south side of "Street A". There is an existing fire hydrant on Miller Avenue north of the project entry.

One portion of the project obtains water from an 8" line in Miller Avenue. Lots 8 and 9 are serviced by an 8" line in Alexander Drive.

2. Fire Access Roads

The width of the public street serving the project (Street "A") is 56' from ROW to ROW. Within this ROW there is 36' of paved street. Parking shall be allowed on both sides of the road.

No secondary access is required for this project.

Grades shall generally be less than 15% and the steepest driveway grade is 20%. No driveway exceeds 20% slope.

The surface of the public street is A/C pavement. Pavement is per the San Diego County Design Manual. Because the street is public, maintenance shall be provided by the County of San Diego.

The radius of the project cul de sac is 36'.

Lots 1 through 6 and 9 have driveways less than 150' and will not include Fire Department turn-arounds. However, a Fire Department turn-around or hammerhead shall be provided for Lots 7 and 8. The inside turning radius shall be 28' on both sides. No parking shall be allowed in the turnarounds. Signage indicating "No Parking" or red curb shall be installed, per Fire Department standards. Language regarding the parking restriction shall also be included in the CC&Rs. Please see redlined plans as part of this submittal.

If any driveway exceeds 400' in length, then a Fire Department turnout shall be required.

Each home shall have a 16' minimum paved driveway consisting of all weather paved surface. Lots 8 and 9 have a 20' paved driveway. All driveways will have 13'6" vertical clearance.

Any lots with a driveway slope greater than 15% will require a concrete driveway with rough broom finish.

No HOA is planned for this development. Therefore, individual property owners are responsible for maintaining their own parcel in compliance with fire codes.

3. Building fire-resistance and ignition

This project provides both basic and enhanced building construction standards. It is considered an infill project.

All homes shall have 20 minute rated glass. All roofs are tile with ignition resistant eaves and OHagen vents with mesh.

Any lots that cannot support a 100' Limited Building Zone will require enhanced construction standards and require a 6' block non-combustible wall to be built. At this time, the exact placement of homes on lots has not been determined.

Decks or any other projections shall be of non-combustible construction, fire retardant treated wood, heavy timber construction or one-hour fire resistive construction. It may be determined by the applicant to not allow decks or similar projections on Lots 4, 5 and potentially Lot 9.

4. Fire Protection Systems

All dwellings and attached garages will have residential fire sprinklers per County Fire Code Section 1003.2.

NFPA 13D automatic fire sprinkler system will be required. Sprinklers will be required on all overhangs exceeding four (4) feet. Smoke detectors shall be required above all stairwell landings. A fire hydrant capable of delivering 1,500 GPM shall be installed off Alexander Drive to service Lots 8 and 9. See attached redline plans.

5. Fire Protection Equipment

Although portable fire extinguishers are recommended, none are required for this project. All homes shall have smoke detector/ alarms installed per the Building Code.

6. Defensible Space

The site is bordered by residential uses to the south and to the east between Interstate 15 and the project site. Stables exist to the southwest of the site. Small scale agriculture exists to the west. Crops included rosemary and lettuce. Areas to the north and east of the project site have been graded for residential development.

This project is considered an infill project. Not all lots are able to provide a 100' Fuel Modification Zone. As shown by the attached exhibit, landscaping and adjacent homes are found within this zone for some lots. No areas of native vegetation exist within this area. Please see number 3 above for information regarding enhanced construction standards for lots that do not comply with the 100' Fuel Modification Zone.

Fencing shall be installed for all lots. The first five feet of fencing adjacent / connected to the homes (the return) shall be wrought iron or wood framed stucco.

7. Vegetation Management

No HOA is planned for this development. Therefore, individual property owners are responsible for maintaining their own parcel in compliance with fire codes. No open space parcels are proposed for this project; however, any easements or similar land uses within the project shall also have the vegetation maintained in a fire-safe manner in perpetuity.

8. Fire Behavior Computer Modeling

Initially, computer fire behavior modeling is not required for this project. However, if all items are not satisfactorily addressed, fire behavior modeling may be necessary. Fire behavior modeling may also be included with the formal Fire Protection Plan which may be required for this project at a later stage of project processing.